Clarke®

24L OIL FREE AIR COMPRESSOR

MODEL NO: RANGER 6/240

PART NO: 2242010

OPERATION & MAINTENANCE INSTRUCTIONS

CE

LS1212

INTRODUCTION

Thank you for purchasing this CLARKE 24L Oil Free Air Compressor.

Please read this manual fully before use and follow the instructions carefully. In doing so you will ensure the safety of yourself and those around you, and you can look forward to your purchase giving you long and satisfactory service.

GUARANTEE

This product is guaranteed against faulty manufacture for a period of 12 months from the date of purchase. Please keep your receipt which will be required as proof of purchase.

This guarantee is invalid if the product is found to have been abused or tampered with in any way, or not used for the purpose for which it was intended.

Faulty goods should be returned to their place of purchase, no product can be returned to us without prior permission.

This guarantee does not effect your statutory rights.

PARTS AND SERVICING

For Parts & Servicing, please contact your nearest dealer, or CLARKE International, on one of the following numbers.

PARTS & SERVICE TEL: 020 8988 7400
PARTS & SERVICE FAX: 020 8558 3622
or e-mail as follows:
PARTS: Parts@clarkeinternational.com
SERVICE: Service@clarkeinternational.com

SAFETY PRECAUTIONS

Before using your compressor it is in your own interest to read and pay attention to the following safety rules.

1. Compressed air is dangerous. Do not point a jet of air at persons or animals, and do not discharge compressed air against the skin.
2. DO NOT operate your compressor with the guard removed.
3. Repairs must only be carried out by a qualified engineer. If problems occur, contact your Clarke dealer.
4. Before carrying out any maintenance, make sure that the pressure is released from the air reservoir, and that the compressor is disconnected from the electrical supply.
5. DO NOT leave pressure in the receiver overnight, or when transporting.
6. DO NOT adjust, or tamper with the safety valves. The maximum pressure is factory set, and clearly marked on the compressor.
7. DO NOT operate in wet or damp conditions. Keep the compressor dry at all times. Similarly, clean air will allow the compressor to work efficiently. Do not use in dusty or otherwise dirty locations.
8. Some of the metal parts can become quite hot during operation. Do not to touch these until the compressor has cooled down.
9. Always set the pressure regulator to the recommended setting for the tool.
10. When spraying flammable materials e.g. cellulose paint, ensure that there is sufficient airflow and keep clear of any source of ignition.
11. Before spraying any material always consult paint manufacturers instructions for safety and usage.
12. Protect yourself. Goggles will protect your eyes from flying particles. Face masks will protect you against paint spray and fumes.
13. Do not apply strain to electrical cables and make sure that air hoses are not kinked or wrapped around the compressor.
14. When disconnecting air hoses or other equipment from your compressor, make sure that the air supply is turned off at the outlet and vent all pressurised air from within the reservoir and other equipment attached to it.
15. Make sure that children and animals are kept well away from the compressor and any equipment attached to it.
16. Make sure that all individuals using the compressor have had the necessary training and have read and fully understand these operating instructions.
17. Make sure that any equipment or tool used in conjunction with your compressor, has a safe working pressure exceeding that of the compressor.
18. Be careful when transporting the compressor to prevent tipping over
19. Permanently installed systems must be installed by a competent engineer.
20. These compressors produce noise levels in excess of 70dB(A). Persons working near the compressor must be supplied with ear protection.

ELECTRICAL CONNECTIONS

WARNING! Read these electrical safety instructions thoroughly before connecting the product to the mains supply.

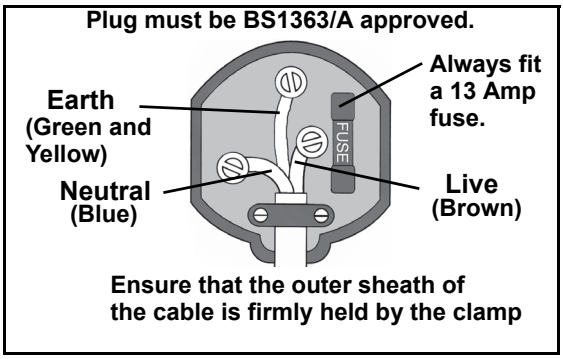
Connect the mains lead to a standard, 230 Volt (50Hz) electrical supply through an approved 13 amp BS 1363 plug, or a suitably fused isolator switch.

If the plug has to be changed because it is not suitable for your socket, or because of damage, it must be removed and a replacement fitted, following the wiring instructions shown below. The old plug must be discarded safely, as insertion into a power socket could cause an electrical hazard.

WARNING! The wires in the power cable of this product are coloured in accordance with the following code:
Blue = Neutral Brown = Live Yellow and Green = Earth

If the colours of the wires in the power cable do not agree with the markings on the plug.

- The BLUE wire must be connected to the terminal which is marked N or coloured black.
- The BROWN wire must be connected to the terminal which is marked L or coloured red.
- The YELLOW AND GREEN wire must be connected to the terminal which is marked E or ⏚ or coloured green.



We strongly recommend that this machine is connected to the mains supply through a Residual Current Device (RCD)

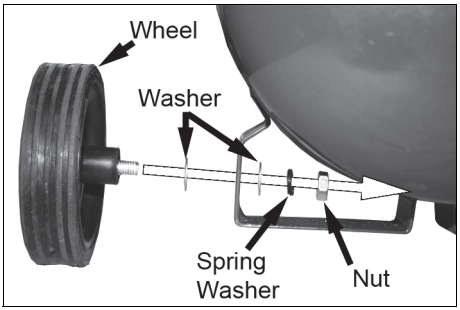
If you are not sure, consult a qualified electrician. DO NOT try to do any repairs.

ASSEMBLY

ATTACH THE WHEELS

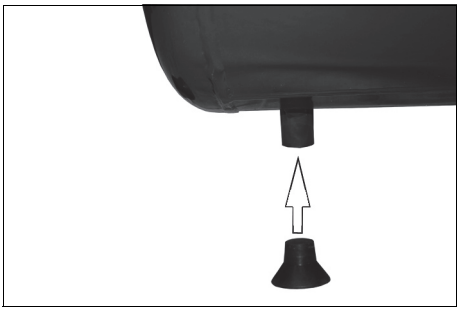
Use a suitable spanner to attach the wheels to the compressor.

Use the washers and spring washer in the positions shown.



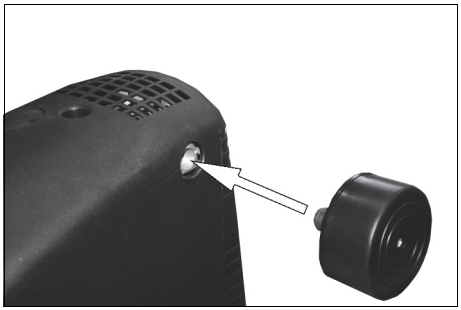
ATTACH THE SUPPORT FOOT

Insert the support foot into the position shown.



FIT THE AIR FILTER

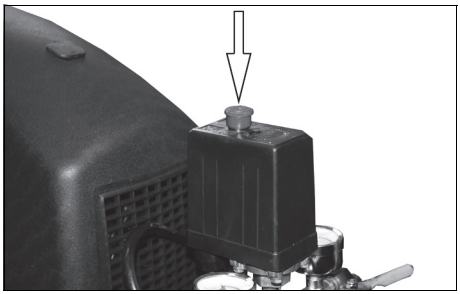
1. If one is fitted, remove the travel plug.
2. Screw the air filter into position.
   - The air filter must be hand tight only.



BEFORE USE

Before connecting your compressor to the power supply, check the following:-

- Set the ON/OFF switch to the OFF position (pushed down).
- Make sure that the compressor is on level ground.
- Make sure that the supply voltage matches the voltage shown on the data label.



MOVING THE AIR COMPRESSOR

CAUTION: TO PREVENT INJURY, GET ASSISTANCE WHEN LIFTING THIS COMPRESSOR.

- Stop the compressor and disconnect it from the power supply before you move it.
- Always use the handle.
- To prevent damage, do not lift by (or put strain on) valves or hoses.

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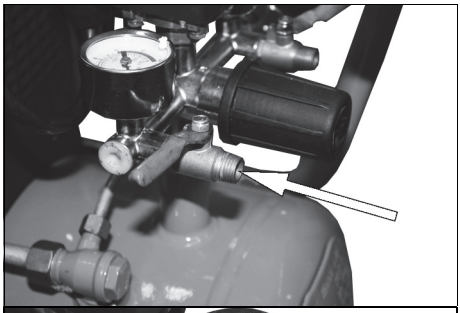
OPERATION

If the compressor has not been used for more then 24 hours, open the drain valve (on the bottom of the reservoir) and drain any condensate which has collected. See page 10.

ATTACHING AIR TOOLS

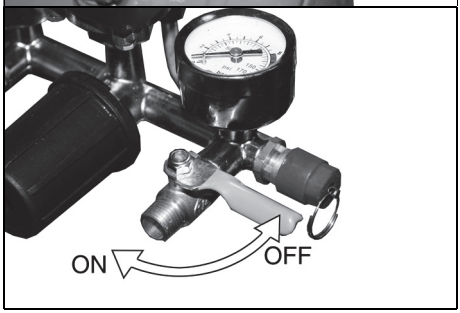
WARNING: BEFORE CONNECTING AIR TOOLS, MAKE SURE THAT YOU READ THE INSTRUCTIONS SUPPLIED WITH THE TOOL, ALSO ENSURE THAT THE TOOL IS SUITABLE FOR USE WITH THE COMPRESSOR AND HOSE SPECIFICATIONS.

1. Attach the air hose to the ¼" BSP outlet valve.
2. Attach the tool to the end of the air hose.



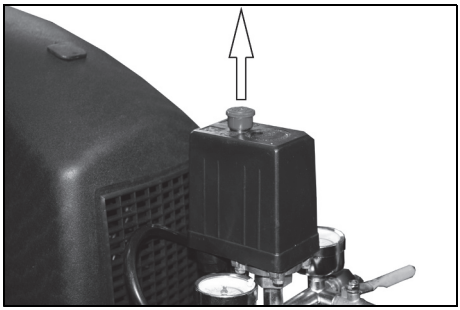
3. Turn the outlet valve handle to the on position.

NOTE: The outlet valve is shown without the air hose fitted for clarity.



TURNING THE COMPRESSOR ON

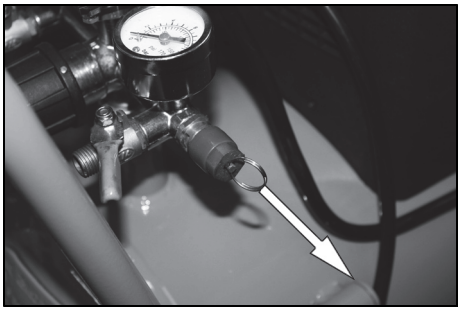
1. Plug the compressor into the power supply.
2. Lift the On/Off button.
   - The compressor will operate until the reservoir is fully pressurised. It will then shut down.
   - The compressor will start up again when the pressure in the reservoir decreases.



CHECK THE SAFETY VALVE

To make sure that the safety valve works correctly.

1. Pull on the ring attached.
   - Air will be released when you pull on the ring and stop when released.
2. If the valve does not operate in this way, do not use the compressor. The compressor must be repaired by a qualified service agent.

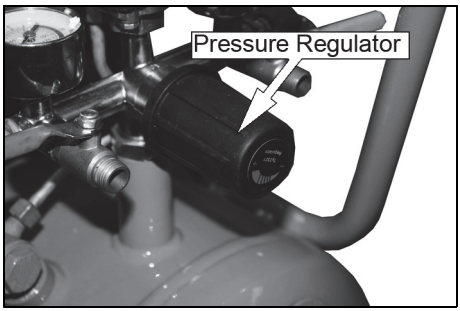


WARNING: DO NOT REMOVE OR TRY TO ADJUST THE SAFETY VALVE.

SET THE OUTPUT PRESSURE

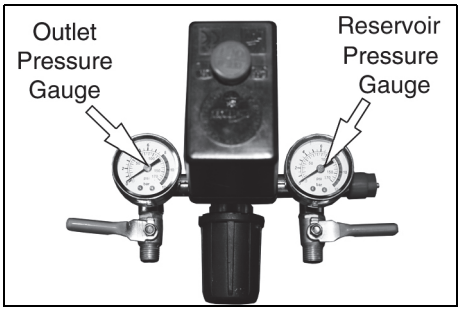
When viewed from the front, the left hand outlet valve is adjustable. The right hand outlet valve will only supply the full reservoir pressure and is not adjustable.

1. Use the pressure regulator to set the output pressure of the left hand outlet valve.
   - Turn clockwise to increase the pressure.
   - Turn counterclockwise to decrease the pressure.



GAUGES

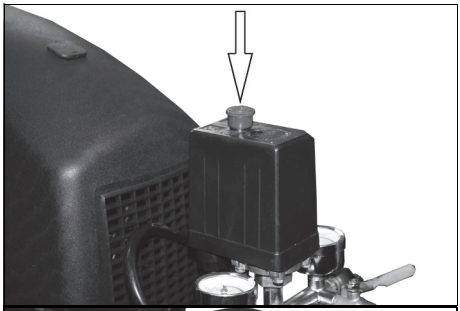
1. The reservoir pressure gauge shows the current pressure in the reservoir.
2. The outlet pressure gauge shows the 'user set' outlet pressure. This can be adjusted as shown above.



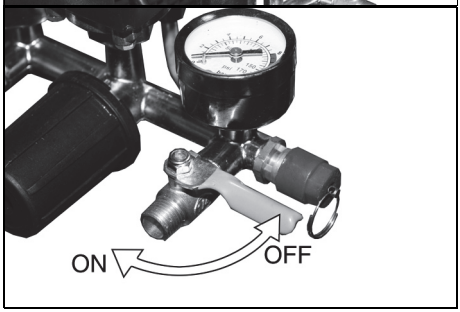
REMOVING TOOLS FROM THE AIR HOSE

WARNING: ALWAYS SET THE PRESSURE REGULATOR TO ZERO BEFORE YOU REMOVE OR REPLACE A TOOL.

1. Push down on the On/Off button to stop the compressor.

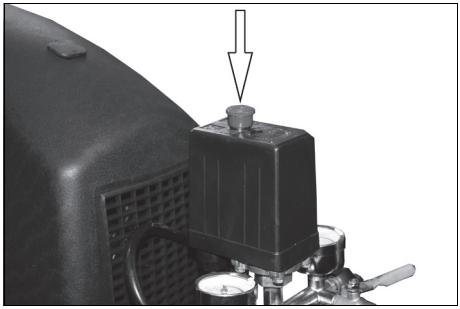


2. Turn the outlet valve handle to the off position.
3. Operate the tool to depressurise the air hose.
4. Disconnect the tool from the hose.



TURNING THE COMPRESSOR OFF

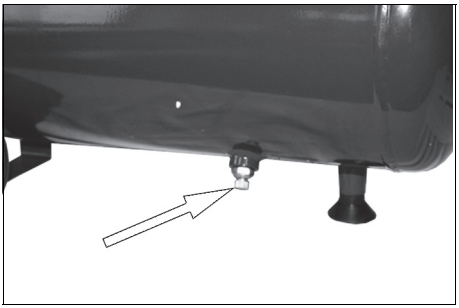
1. Follow steps 1-3 in "Removing Tools From The Air Hose" above.
2. Disconnect the compressor from the power supply.
3. Slowly open one of the outlet valves to depressurise the reservoir.
   - You will hear a hissing sound as the reservoir depressurises.
   - Do not leave the compressor unattended if the reservoir is pressurised.



DRAINING THE RESERVOIR

CAUTION: YOU MUST DRAIN THE RESERVOIR AFTER EACH DAYS USE AND BEFORE YOU PUT YOUR COMPRESSOR INTO STORAGE.

1. Turn the compressor off and disconnect from the power supply.
2. Put a container below the drain valve to collect the condensate.
3. Open the drain valve slowly.
   - Condensation will drain from the reservoir.
4. Close the drain valve when the reservoir has fully drained.

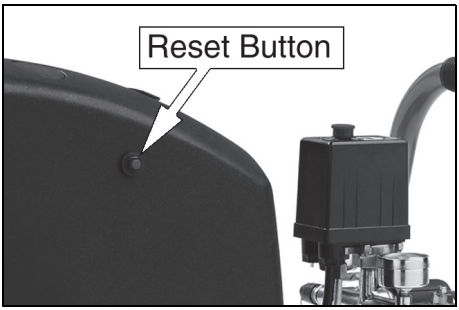


RESET BUTTON

This compressor has a thermal overload device.

If the motor gets too hot, the thermal overload device cuts the power which prevents damage to the motor.

If the thermal overload device operates, let the motor cool down for 5 minutes and push the reset button.



If you start the compressor and the overload cutout operates again, stop the compressor and disconnect from the power supply and have your compressor examined by a qualified service agent.

MAINTENANCE

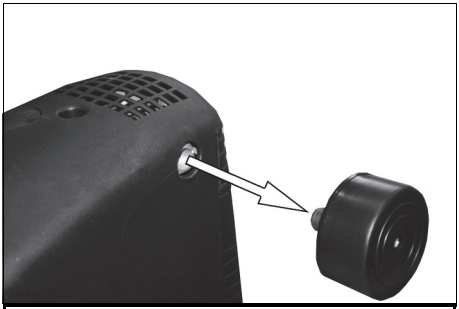
DRAIN THE RESERVOIR (DAILY)

After use, always open the drain valve to make sure that any condensate is drained off.

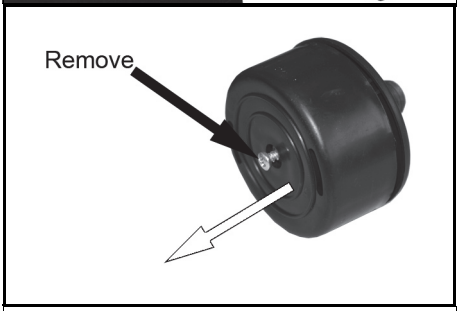
CLEAN THE AIR FILTER (MONTHLY)

The air filter must be examined monthly, more often in dusty conditions,

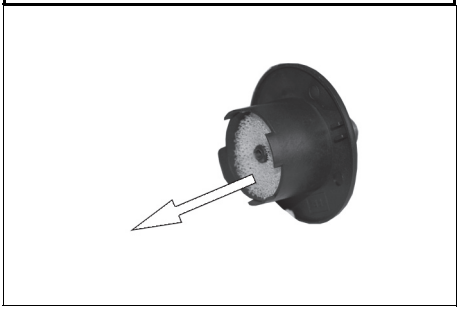
1. Remove the filter from the compressor.



2. Remove the filter cover from the filter.



3. Remove the filter from the filter cover.
4. Clean the sponge and the filter cover using a soft brush.
   - If necessary, the filter can be carefully cleaned in warm soapy water.
   - Rinse and let the filter dry completely before refitting.



5. Make sure that the filter and filter cover are replaced into position.
   - If the filter is damaged, you must replace it.

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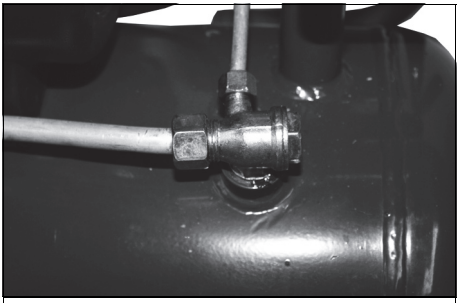
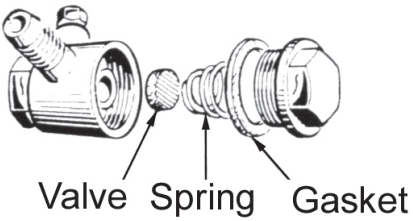
CHECK THE NON-RETURN VALVE (EVERY 6 MONTHS)

If the reservoir pressure decreases for no apparent reason, it is possible that the non-return valve is leaking. To check,

1. Make sure that the reservoir is not under pressure and the compressor is switched OFF and disconnected from the power supply.
2. Examine the non-return valve, and replace the gasket and valve if necessary.





SPECIFICATIONS

Max Pressure	8 Bar
Voltage	230 VAC (50/60Hz)
Air Displacement	6 CFM
Receiver Capacity	24 L
Fuse Rating	13 A
Dimensions (L x W x H)	545 x 310 x 590 mm
Guaranteed Sound Power Level	93 dB(A)
Weight	23.8 kg

Please note that the details and specifications contained herein, are correct at the time of going to print. We reserve the right to change specifications at any time without prior notice.

TROUBLESHOOTING

CAUTION: DO NOT TRY TO REPAIR OR ADJUST THIS COMPRESSOR IF YOU ARE UNCERTAIN. IF YOU HAVE ANY QUERIES, CONTACT YOUR DEALER.

PROBLEM	PROBABLE CAUSE	REMEDY
The compressor has stopped and does not start.	Bad electrical connections.	1. Check electrical connections. 2. Clean and tighten if necessary.
	Overload cutout switch has tripped.	1. Switch off and wait approx 5 minutes. 2. Press the reset button and switch on again.
	Motor windings burnt out.	1. Contact your Clarke dealer for a replacement motor.
The compressor does not reach the set pressure and overheats easily.	Compressor head gasket blown or valve broken.	1. Return the machine to your nearest service agent.
Compressor does not start.	The reservoir has already fully pressurised.	1. Open drain valve to expel air. Compressor should start again when pressure reduces.
Air leaking from the non-return valve when the compressor is not running.	Faulty non-return valve.	1. Drain receiver completely of air. 2. Remove the valve end plug, 3. Carefully clean the valve seat and the gasket 4. Reassemble.
Air pressure from the regulator will not adjust.	The diaphragm within the regulator body is broken.	1. Replace regulator
The compressor is very noisy and makes a metallic knocking sound.	Compressor damaged and needs overhaul.	1. Return the machine to your nearest service agent.

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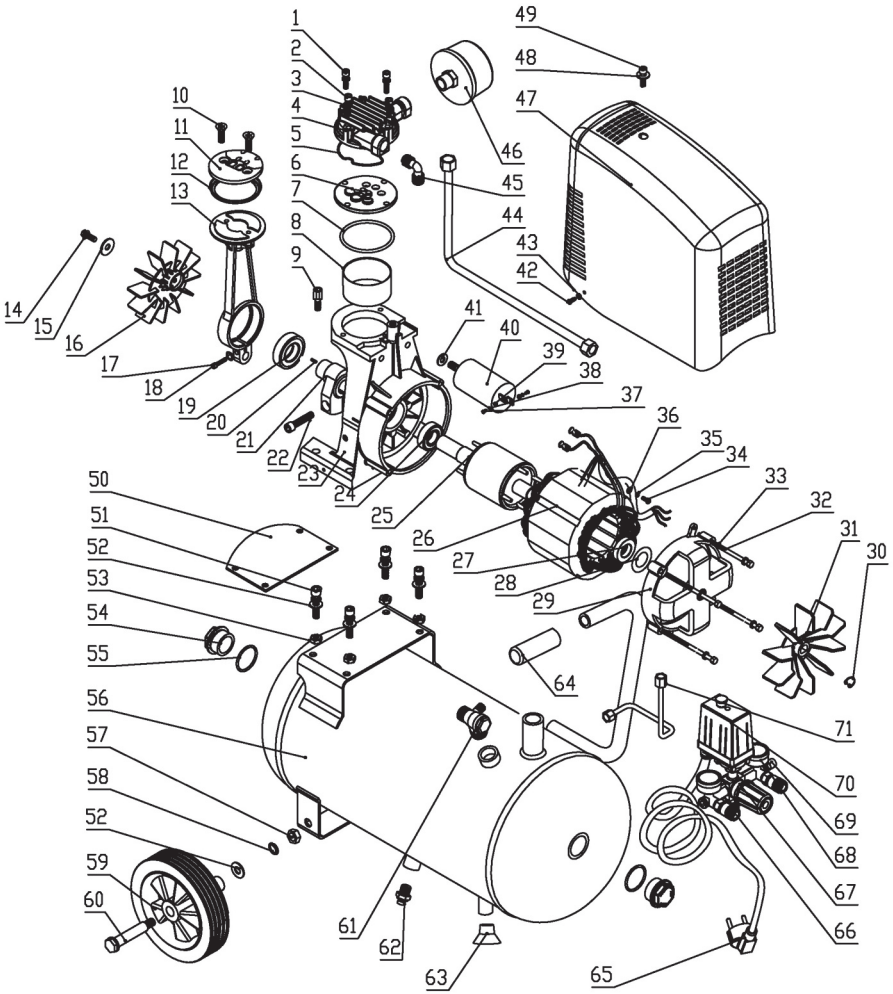
EXPLODED DIAGRAM



PARTS LIST

	Description	Part No
1	Bolt M6×25	HTRAN624001
2	Bolt M6×35	HTRAN624002
3	Spring Washer	HTRAN624003
4	Cylinder Head	HTRAN624004
5	O Circle	HTRAN624005
6	Valve Plate Subassembly	HTRAN624006
7	Cylinder Seals	HTRAN624007
8	Cylinder	HTRAN624008
9	Connection Stud	HTRAN624009
10	Screw M5×16	HTRAN624010
11	Connecting Rod Cover	HTRAN624011
12	Piston Ring	HTRAN624012
13	Connecting Rod	HTRAN624013
14	Bolt M6×16	HTRAN624014
15	Big Washer 6	HTRAN624015
16	Fan	HTRAN624016
17	Bolt M4×20	HTRAN624017
18	Spring Washer	HTRAN624018
19	Bearing 6005-2rs	HTRAN624019
20	Pin ?4x14	HTRAN624020
21	Crank	HTRAN624021
22	Screw M8×35-left	HTRAN624022
23	Crankcase	HTRAN624023
24	Bearing 6204-rs	HTRAN624024
25	Rotor	HTRAN624025
26	Stator Subassembly	HTRAN624026
27	Bearing 6202-rs	HTRAN624027
28	Corrugate Washer 34	HTRAN624028
29	Motor Bracket	HTRAN624029
30	Circlip ?14	HTRAN624030
31	Fan	HTRAN624031
32	Bolt M5×105	HTRAN624032
33	Spring Washer	HTRAN624033
34	Screw M4×10	HTRAN624034

No	Description	Part No
35	Spring Washer	HTRAN624035
36	Tooth Washer 4	HTRAN624036
37	Screw M3×6	HTRAN624037
38	Spring Washer	HTRAN624038
39	Nut M3	HTRAN624039
40	Capacitance	HTRAN624040
41	Tooth Washer 8	HTRAN624041
42	Screw St3.9x12	HTRAN624042
43	Washer 4	HTRAN624043
44	Discharge Pipe	HTRAN624044
45	Elbow Connecter	HTRAN624045
46	Air Filter	HTRAN624046
47	Fan Cover	HTRAN624047
48	Big Washer 8	HTRAN624048
49	Screw M?×12	HTRAN624049
50	Base Board	HTRAN624050
51	Bolt M8×25	HTRAN624051
52	Washer 8	HTRAN624052
53	Flange Nut M8	HTRAN624053
54	Plug	HTRAN624054
55	O Ring	HTRAN624055
56	24l Tank	HTRAN624056
57	Nut M8	HTRAN624057
58	Spring Washer 8	HTRAN624058
59	Wheel 5?	HTRAN624059
60	Axle	HTRAN624060
61	Checking Valve	HTRAN624061
62	Drain Valve 1/4 Inch	HTRAN624062
63	Absorber	HTRAN624063
64	Handle Grip	HTRAN624064
65	Power Cord	HTRAN624065
66	Quick Coupler	HTRAN624066
67	Regulate Valve	HTRAN624067
68	Pressure Gauge	HTRAN624068
69	Safety Valve	HTRAN624069

No	Description	Part No
70	Pressure Switch	HTRAN624070
71	Release Pipe	HTRAN624071

DECLARATION OF CONFORMITY

CE

Clarke® INTERNATIONAL

Hemnall Street, Epping, Essex CM16 4LG

DECLARATION OF CONFORMITY

This is an important document and should be retained.

Product Description:	Oil free air compressor
Model number(s):	Ranger 6/240
Serial / batch Number:	N/A
Date of Issue:	10/12/2012
(Noise Conformity)	
Notified Body:	TÜV SÜD Industrie Service GmbH
	Westendstraße 199
	80686 MÜNCHEN
	Germany
Technical Documentation Holder:	A.R. Pond
	Clarke International
	2a Shrubland Road
	London E10 7RB
	UK
Conformity Assessment Procedure:	to 2000/14/EC Annex VI
Manufacturer:	Clarke International
Noise Related Value:	1.5 kW
Measured Sound Power Level:	91 dB
Guaranteed Sound Power Level:	93 dB

DECLARATION OF CONFORMITY

CE

Clarke®
INTERNATIONAL
Hemnall Street, Epping, Essex CM16 4LG

DECLARATION OF CONFORMITY

This is an important document and should be retained.

We hereby declare that this product(s) complies with the following directive(s):

2004/108/EC	*Electromagnetic Compatibility Directive.*
2006/42/EC	*Machinery Directive.*
2011/65/EU	*Restriction of Hazardous substances.*
2009/105/EC	*Simple Pressure Vessel Directive.*
2000/14/EC	*Noise Emissions Directive, (amended by 2005/88/EC).*

The following standards have been applied to the product(s):

EN 61000-3-2:2006, EN 55014-2:1997 +A1:2001 +A2:2008, EN 1012-1:1996, EN 61000-3-3:2008, EN 60204-1:2006/A1:2009.

The technical documentation required to demonstrate that the product(s) meet(s) the requirement(s) of the aforementioned directive(s) has been compiled and is available for inspection by the relevant enforcement authorities.

The CE mark was first applied in: 2010

Signed:

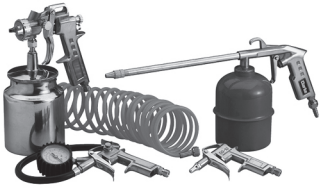
J.A. Clarke
Director

Parts & Service: 020 8988 7400 / E-mail: Parts@clarkeinternational.com or Service@clarkeinternational.com

POPULAR ACCESSORIES

Your local Clarke stockists can supply a wide choice of accessories to help you make the very best of your air compressor. These include:

KIT1000



5 Piece Air Accessory Kit – KIT100
Kit comprises:
- Paint spray gun • Recoil hose • Paraffin gun
- Tyre inflator with gauge • Blow gun • All connections 1/4" BSP
- Weight 2kg

CAT116
3/8" Air Drill

CAT118
Sabre Saw

CAT121
Dual Action Sander

CAT108
1/2" Square Drive Reversible Ratchet

CAT109
3/8" Square Drive Reversible Ratchet

CAT115
1/2" Reversible Ratchet

CAT110
1/2" Square Drive Impact Wrench

CAT117
1/2" Impact Wrench

CAT111
Orbital Sander

CAT113
3" CUT-OFF TOOL

A comprehensive choice of Clarke spraying equipment is available for your air compressors, including:

PRO12
This professional spraygun is available with a choice of nozzle sizes to suit air compressors from 1.5HP – 3HP.

TG2
Touch up gun ideal for precision paint spraying and touch up work. This syphon fed, external mix spraygun is popular with professionals.

Air hose is available in a range of lengths. Amongst the most popular are:

BLACK RUBBER AIR HOSE
Complete with connections, this hose is available in lengths from 10m to 50m

RECOIL HOSE
Ideal for DIY and professional use, this recoil house is available in a range of lengths

NOTES

A SELECTION FROM THE VAST RANGE OF

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